

A NEW GYPSOPHILIC SPECIES OF *XYLOTHAMIA* (ASTERACEAE:
ASTEREAE) FROM THE CUATRO CIENEGAS AREA OF COAHUILA, MEXICO

Guy L. Nesom

Department of Botany, University of Texas, Austin, Texas 78713 U.S.A.

ABSTRACT

A new and apparently rare species of *Xylothamia* is described from the area of Cuatro Cienegas in Coahuila, México. It is most closely related to *X. triantha*.

KEY WORDS: *Xylothamia*, Asteraceae, Astereae, México, gypsophile

In the Cuatro Cienegas area of Coahuila, México, in 1985, I collected branches from several plants that I assumed were malformed individuals of *Isocoma coronopifolia* (DC.) E. Greene. The seemingly "malformed" plants had heads peculiarly buried in the leafy apices of thick branches, and they were growing intimately intermixed with normal plants of the *Isocoma*. These plants have until now rested in a folder with other anomalies, but recent re-examination of this material clearly places them within the genus *Xylothamia* (Nesom *et al.* 1991). The 1985 collection apparently represents a previously undescribed species.

Xylothamia truncata Nesom, *sp. nov.* TYPE: MEXICO. Coahuila: Mpio. Cuatro Cienegas, ca. 2 km W of town of Cuatro Cienegas, along dirt road paralleling railroad, hard packed gypseous sand, with *Isocoma coronopifolia*, *Machaeranthera gypsophila*, and *M. restiformis*, 18 Oct 1985, G. Nesom 5254 (HOLOTYPE: TEX).

Xylothamiae trianthae (S.F. Blake) Nesom similis foliis involutis fere teretibus, capitulis eradiatis flosculis discii paucis, et appendicibus linearibus stylorum, sed caulibus pauciramosis crassisque, foliis confertim dispositis ad apices ramorum, capitulis sessilibus terminalibusque, et corollis dense strigosis in tubis ac faucibus differt.

Low perennial shrubs ca. 2-3 dm tall, with thick (mostly 1.5-2.0 mm thick) stems branched near the base. Leaves with a rough (slightly papillate), glutinous surface, not evidently punctate, linear, involute and appearing terete, 4-8(-14) mm long, ca. 1 mm wide, straight or recurved, all densely clustered along the terminal 2-3 cm of the branches. Heads turbinate, 2.5-3.5 mm wide, sessile in groups of 2-3 at each branch apex, more or less imbedded in the surrounding leaves; phyllaries glutinous, not at all keeled, with a glandular, elliptic, apical patch ca. 1 mm long, enervate and white indurated below, ovate-lanceolate with broad, translucent margins, graduated in 2-3 series, the inner 3.5-4.0 mm long, the outer half as long. Ray flowers absent. Disc flowers 3-5, the corollas narrowly funnelform, 3.5-3.8 mm long, the tube ca. 2 mm long, zygomorphic, with 2 of the sinuses cut nearly to the base of the throat, one very shallow, and the other 2 intermediate in depth, the tube and lower throat prominently invested with long, stiff, uniseriate hairs; style branches 1.0-1.2 mm long, linear-triangular, the collecting appendages 0.6-0.8 mm long, sparsely pilose with spreading hairs. Achenes turbinate, ca. 1.5 mm long, densely sericeous, 5-6 nerved; pappus of ca. 40, slender, flattened, marginally ciliate bristles uneven in width and length. Known only from the type collection.

Among the species of *Xylothamia*, *X. truncata* clearly is most similar to *X. triantha* in its involute, linear and nearly terete leaves, eradiate heads with few disc flowers, and linear-triangular style appendages. The new species differs from *X. triantha* in its thick, few branched stems, leaves densely arranged at the branch apices, heads sessile and strictly terminal, and corollas densely hairy on the tube and throat; the stems of *X. triantha* are much thinner (0.5-0.8 mm wide) and somewhat intricately branched, the heads are sessile to subsessile in numerous few headed clusters that are arranged in a loose, more or less open capitulescence, the heads larger (inner phyllaries 4-5 mm long), and the corollas are glabrous and larger (4-5 mm long). Even among plants of *X. triantha* with stems broken or otherwise damaged (as seen on LL, TEX specimens), none even approach the peculiar habit of *X. truncata*. The epithet refers to the abruptly terminated branch tips crowded with leaves and heads.

Xylothamia triantha occurs at the eastern periphery of its range (Nesom *et al.* 1991, Fig. 1) in alluvial gypseous soils of the Cuatro Ciénegas area, where it is represented by numerous herbarium specimens. Two other species of *Xylothamia* also occur in or near the Cuatro Ciénegas basin, *X. pseudobaccharis* (S.F. Blake) Nesom and *X. purpusii* (Brandeg.) Nesom. Because of its inconspicuous habit and nearly hidden capitula, *X. truncata* may have been overlooked by collectors in the same area, but even if so, it must be a rare species. Few of the other known species of the genus are abundant, the Cuatro Ciénegas area has been visited by many perceptive botanists, and its flora is well known (Pinkava 1984).

ACKNOWLEDGMENTS

I thank Dr. B.L. Turner and Dr. D.J. Pinkava for their comments on the manuscript.

LITERATURE CITED

- Nesom, G.L., D.R. Morgan, Y. Suh, & B.B. Simpson. 1990. *Xylothamia* (Asteraceae: Astereae), a new genus related to *Euthamia*. *Sida* 14:101-116.
- Pinkava, D.J. 1984. Vegetation and flora of the Bolson of Cuatro Ciénegas region, Coahuila, Mexico: IV. Summary, endemism and corrected catalogue. Pp. 23-47, in P.C. Marsh (ed.), *Biota of Cuatro Ciénegas, Coahuila, Mexico*. *J. Ariz.-Nev. Acad. Sci.* 19:1-90.